

SQL

RAY

SCHEDULE

- RECAP / HW
- MORE PRACTICES
- JOINS / UNIONS
- HW

RECAP

- COMMON COMMANDS IN SQL?
- WHAT ARE THE COMMON AGGREGATION FUNCTIONS?
- WHY SPECIFY DATA TYPES?
- COMMON DATA TYPES?

RECAP HW

- [A-Z] IN ASCII / HEX ENCODING

HW ANS

```
IMPORT STRING
```

```
DATA = LIST(STRING.ASCII_UPPERCASE) + LIST(STRING.ASCII_LOWERCASE)
```

```
FOR ELMT IN DATA:
```

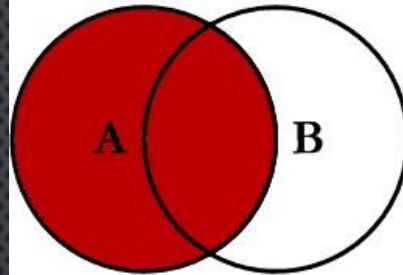
```
    PRINT("%2s, %3D, %2s" % (ELMT, ORD(ELMT), HEX(ORD(ELMT))))
```

MORE PRACTICES

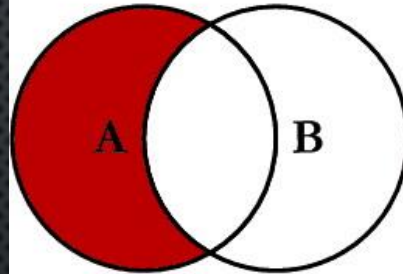
- TYPE OF TRIANGLES (HACKERRANK)
 - CASE STATEMENT (W3SCHOOL)
- WEATHER OBSERVATION -6
 - LIKE OPERATOR
 - DISTINCT STATEMENT
- WEATHER OBSERVATION -11
- WEATHER OBSERVATION -19

JOINS

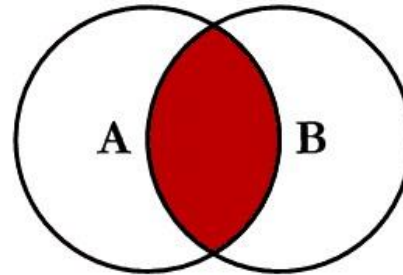
SQL JOINS



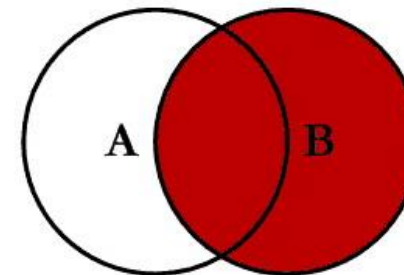
```
SELECT <select_list>
FROM TableA A
LEFT JOIN TableB B
ON A.Key = B.Key
```



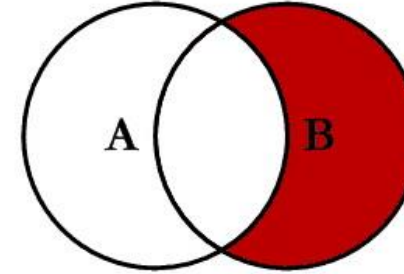
```
SELECT <select_list>
FROM TableA A
LEFT JOIN TableB B
ON A.Key = B.Key
WHERE B.Key IS NULL
```



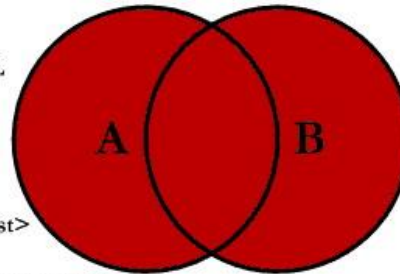
```
SELECT <select_list>
FROM TableA A
INNER JOIN TableB B
ON A.Key = B.Key
```



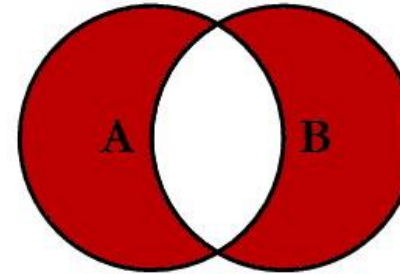
```
SELECT <select_list>
FROM TableA A
RIGHT JOIN TableB B
ON A.Key = B.Key
```



```
SELECT <select_list>
FROM TableA A
RIGHT JOIN TableB B
ON A.Key = B.Key
WHERE A.Key IS NULL
```



```
SELECT <select_list>
FROM TableA A
FULL OUTER JOIN TableB B
ON A.Key = B.Key
```



```
SELECT <select_list>
FROM TableA A
FULL OUTER JOIN TableB B
ON A.Key = B.Key
WHERE A.Key IS NULL
OR B.Key IS NULL
```

JOIN UNION

id
1
2
3

UNION

id
2
3
4



id
1
2
3
4

Append
result sets
vertically

id
1
2
3

INNER
JOIN

id
2
3
4



id	id
2	2
3	3

Append
result sets
horizontally

UNION JOIN PRATICES

- **ALIASES**
- POPULATION CENCUS
- AVERAGE POPULATION OF EACH CONTINENT

HW

- DESIGN A SCHEMA (MORE THAN ONE TABLE) THAT MET THE FOLLOWING REQUIREMENT AND ESTIMATE THE MEMORY SIZE OF WHICH YOU DESIGN
 - 4000 STUDENTS
 - MUST BE ABLE TO QUERY:
 - PUBLIC ACCESSIBLE INFO:
 - STUDENT ID, START WITH 0001
 - FIRST NAME
 - LAST NAME
 - SEX
 - ENROLLMENT CLASS ID
 - LOCKED INFO:
 - HOME ADDRESS
 - EMERGENCY CONTACT NUMBER
 - GRADE
- OLIVANDER'S INVENTORY